





The Programmed Data Processor (PDP) is a solid-state, high speed, general purpose digital computer. Parallel binary arithmetic provides capability for 100,000 complete additions per second. The modular magnetic core memory has a 5 microsecond cycle time. Paper tape and typewriter are used for monitoring of computer operation.

Real time applications of the PDP in the fields of weapon simulation, system control and medical data analysis are made feasible by its high speed. Flexibility of the input-out put design of the computer permits special terminal equipment to be conveniently connected.

OPERATING FEATURES

5 Microsecond Core Memory — modules of 4096 words. Parallel Binary numbers using 1's complement arithmetic. Input-Output typewriter for monitoring. Word length - PDP-1 18 bits, PDP-3 36 bits (other word lengths also available). Single address instructions. Multiple step indirect addressing.

31 registers of the main memory useable as automatic

index registers. Punched paper tape for input-output. Logical arithmetic commands. Power, 115v AC, 60 cycle.

CALCULATING SPEEDS

100,000 addition type instructions. 200,000 non-memory type instructions per second. 40.000 average multiplications per second (PDP-3). (PDP-1 multiplies by subroutine requiring approximately 500 microseconds).

CONSOLE FEATURES

Indicators on all flip-flops grouped for convenient octal reading.

Six Program Flags for automatic setting and computer sensing.

Six Sense Switches for manual setting and computer sensing. Automatic read-in mode for paper tape. Test Word and Test Address switches.

Deposit Switch for manually entering memory words. Examine Switch for manually reading memory words.

OPTIONAL FEATURES

Photoelectric tapereader - 300 lines per second. Compatible Magnetic Tape - 75 inches per second, 200 bits per inch, 7 bits per line including parity. Line Printer - 600 lines per minute. 17 inch Cathode Ray Tube Display. Light Pen Input. Analog Inputs. Analog Outputs.



MAYNARD, MASSACHUSETTS